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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 6109 Joseph W. Schaffer 10/614,759 07/08/2003 **EXAMINER** 7590 04/16/2004 THOMPSON, JEWEL VERGIE JONES, TULLER & COOPER, P.C. P.O. Box 2266 PAPER NUMBER ART UNIT **Eads Station** 2855 Arlington, VA 22202

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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91		Applicatio	n No.	Applicant(s)		
Office Action Summary		10/614,75	9	SCHAFFER ET AL.		
		Examiner		Art Unit		
		Jewel V Th	ompson	2855		
The MAILING DATE of this Period for Reply	communication app	pears on the	cover sheet with the c	orrespondence addi	ess	
A SHORTENED STATUTORY PI THE MAILING DATE OF THIS CO Extensions of time may be available under the after SIX (6) MONTHS from the mailing date If the period for reply specified above is less If NO period for reply is specified above, the Failure to reply within the set or extended pe Any reply received by the Office later than the	OMMUNICATION. e provisions of 37 CFR 1.1 of this communication. than thirty (30) days, a repl maximum statutory period v riod for reply will, by statute ree months after the mailing	136(a). In no ever ly within the statut will apply and will e, cause the appli	nt, however, may a reply be tin fory minimum of thirty (30) day expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered timely. the mailing date of this com D (35 U.S.C. § 133).	munication.	
earned patent term adjustment. See 37 CFR Status	1.704(b).					
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1) Responsive to communicat			.			
2a) This action is FINAL .	· -					
<i>,</i> — · · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with t	ne practice under <i>E</i>	Ex parte Qua	ayle, 1935 C.D. 11, 4:	53 O.G. 213.		
Disposition of Claims						
4)⊠ Claim(s) <u>1-4</u> is/are pending	in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allow	ed.					
6)⊠ Claim(s) <u>1-4</u> is/are rejected.						
7) Claim(s) is/are object	cted to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected	t to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>08 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is o	•	•	- · ·	-		
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made o	f a claim for foreign	n nriority und	or 3511 S.C. & 110/a	\-(d) or (f)		
a) All b) Some * c) N 1. Certified copies of th	one of: e priority document	ts have beer	n received.			
2. Certified copies of th	•					
3. Copies of the certifie	•	-		ed in this National S	tage	
application from the		,	* **			
* See the attached detailed Of	fice action for a list	of the certif	ied copies not receive	ed.		
Attachment(s)						
1) Notice of References Cited (PTO-892)			4) Interview Summary			
2) Notice of Draftsperson's Patent Drawing			Paper No(s)/Mail Da Notice of Informal F		152)	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:					,	

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Vander Heyden (4,663,977).

Regarding claim 1, Vander Heyden teaches a flow meter, comprising: a primary flow sensor (1,2); sensor electronics (fig. 1) connected to the primary flow sensor for proving a measurement signal; a signal processing unit (16) connected to the sensor electronics for determining the flow, the signal processing unit (16) being set to produce a signal proportional to the flow rate or the square of the flow rate (col. 13, lines 55-58); and an output signal generator (12) for generating an output signal proportional to the signal of the signal processing unit (col. 9, lines 23-24).

Regarding claim 3, Heyden teaches the primary flow sensor includes two ultrasonic transducers (1 and 2) serving as transmitters and receivers (col. 6, lines 35-38).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vander Heyden in view of Fletcher-Haynes (5,831,175).

Regarding claim 2, Vander Heyden fails to teach a communication interface, allowing a user to set the output signal to be proportional to the flow rate or the square of the flow rate. Fletcher-Haynes teaches a flow meter equipped with a suitable data input device, a keyboard (16). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the keyboard of Fletcher-Haynes in the flow meter of Vander Heyden for the purpose of being supplied with user selectable constants and mode control commands (col. 8, lines 52-55, Fletcher-Haynes)

Regarding claim 4, Vander Heyden fails to explicitly teach the output signal generator comprises part of the signal processing unit. However the signal processor (16) is part of the entire system. It would have been obvious to one of ordinary skill in that art at the time that the invention was made to have known that the generator of Vander Heyden is a part of the signal processor for the purpose of determining the sonic velocity from the signals generated from the generator (abstract, Vander Heyden)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5,578,763) Spencer et al teaches an electromagnetic flow meter comprising a signal processor and a generator

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/ Jvt / April 7, 2004 SUPERVISORY PATENT EXAMINER

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